EPI Update for Friday, May 14, 2010 Center for Acute Disease Epidemiology Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- Update on mumps in northwest lowa
- Pertussis activity in south central lowa
- A review of Legionnaire's disease
- Vancomycin resistant Staphylococcus aureus (VRSA)
- Meeting announcements and training opportunities

Update on mumps in northwest lowa

Since early May, nine patients have tested positive for mumps. Seven of these nine patients were residing in Sioux County at the time of diagnosis; one resides in O'Brien County and the other in Plymouth County. There is continued concern of additional spread, particularly in northwest Iowa. Please notify your local public health agency immediately of any suspected cases. Testing (IgM serology and buccal swab for PCR) of those with mumps consistent symptoms should be conducted through the University Hygienic Laboratory (UHL) and courier services are available to transport specimens to UHL (testing and courier provided free of charge). The local public health agency can assist in obtaining specimen collection kits, facilitating transport via the UHL courier, and providing instructions for specimen collection. The average turnaround time for the testing is approximately 48 hours (this includes courier transport time). For additional information on mumps testing visit: www.uhl.uiowa.edu/services/mumps

For additional information on mumps please call 800-362-2736 or visit www.idph.state.ia.us/adper/mumps.asp.

Pertussis activity in south central lowa

There have been increased reports of pertussis in south central Iowa. Pertussis, or whooping cough, is a bacterial infection caused by the bacterium *Bordetella pertussis*. This common respiratory infection should be considered in patients with a cough illness lasting a minimum of two weeks and one of the following:

- Paroxysms of coughing
- Inspiratory "whoop"
- Post-tussive vomiting without other apparent cause

Please note that adults often have atypical presentation, such as a cough that lasts several weeks.

Testing is available at University Hygienic Laboratory. For PCR testing, appropriate samples include nasopharyngeal (NP) swabs placed in viral transport media or NP aspirates placed in sterile vials.

Pertussis is highly contagious and can be transmitted through contact with respiratory droplets or airborne droplets of respiratory secretions. Close contacts of a patient with pertussis should be given antibiotics for prophylaxis regardless of their immunization status.

Healthcare providers should review immunization statuses of all patients and immunize as needed.

For additional information, visit www.idph.state.ia.us/adper/pertussis.asp.

A review of Legionnaire's disease

Recently, Legionnaire's disease has been in the news. It is a form of pneumonia more common in patients with known risk factors, such as those over age 65, smokers, males, and those with chronic lung disease or a weakened immune system. Legionnaire's disease is caused by the gram-negative bacteria *Legionella*. Disease is acquired through inhalation of aerosols containing the bacterium, and is not spread from person to person.

Legionella has been recovered from a wide variety of domestic water systems and is ubiquitous in freshwater environments. Most outbreaks of disease have been associated with aerosolized water from cooling towers, evaporative condensers, showers, whirlpool spas, and humidifiers. Routine testing of water sources for Legionella is not recommended except in instances where human disease has been identified.

Legionnaire's disease is a reportable disease in Iowa. There were 21 cases reported to the Iowa Department of Public Health in 2009.

For more information, please visit www.cdc.gov/legionella/index.htm or www.idph.state.ia.us/idph universalhelp/main.aspx?system=IdphEpiManual.

Vancomycin resistant *Staphylococcus aureus* (VRSA)

CDC has confirmed the 11th case of VRSA infection since 2002 in the United States (no cases have been identified in Iowa). While VRSA infection remains a rare occurrence, this serves as another reminder of the problem of antibiotic resistance. Any VRSA infection diagnosed in Iowa should be reported immediately to the Iowa Department of Public Health at 1-800-362-2736.

The factors that may predispose case patients to VRSA infection include:

- Prior MRSA and enterococcal infections or colonization
- Underlying conditions (such as chronic skin ulcers and diabetes)
- Previous treatment with vancomycin

Appropriate antimicrobial prescribing, adherence to recommended infection control guidelines, and the control of both MRSA and VRE are necessary to prevent further emergence of VRSA strains.

For more information on the prevention of VRSA see www.cdc.gov/mmwr/preview/mmwrhtml/00039349.htm.

Meeting announcements and training opportunitiesNone

Have a healthy and happy week! Center for Acute Disease Epidemiology lowa Department of Public Health 800-362-2736